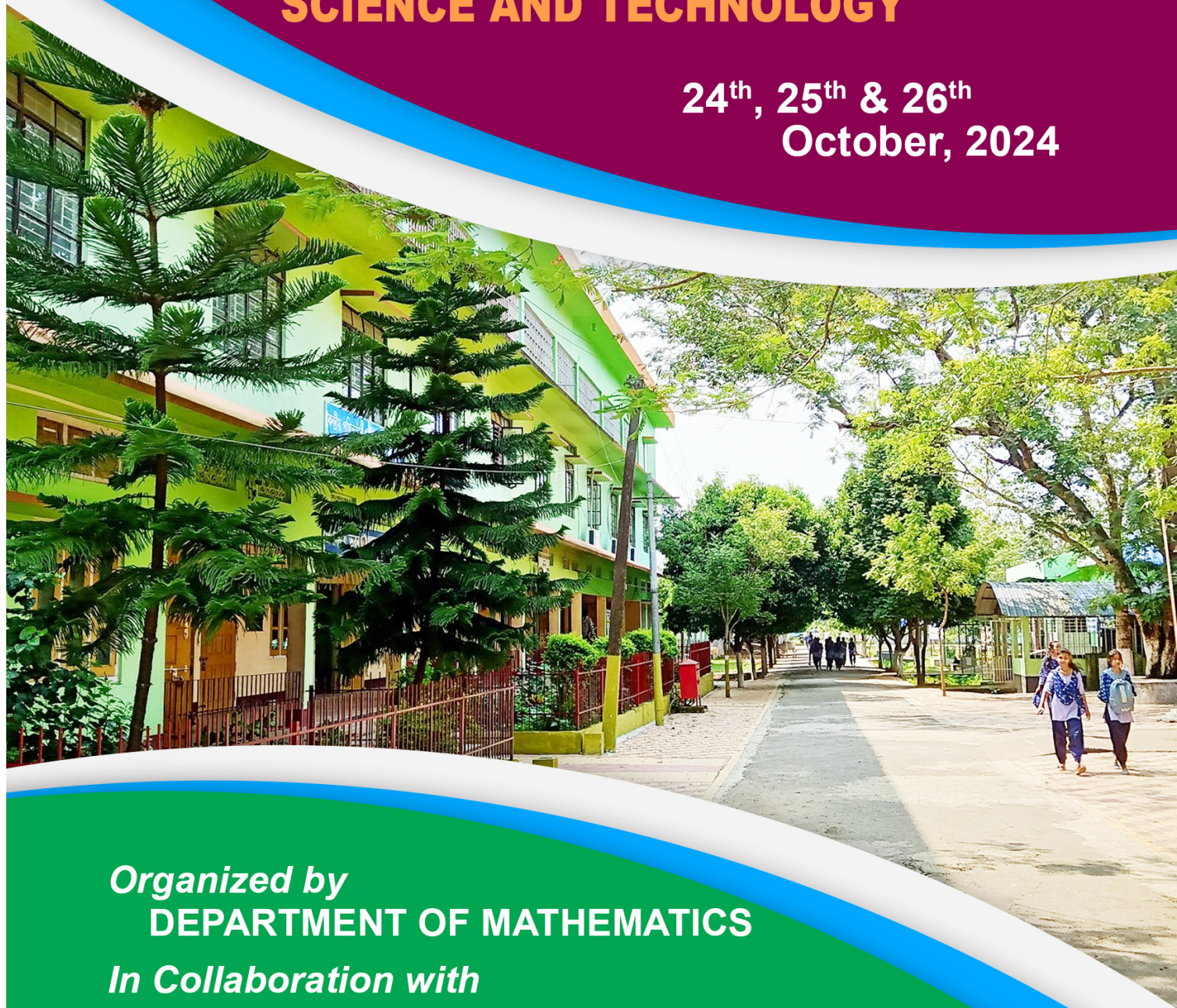


**INTERNATIONAL CONFERENCE
ON
EMERGING ROLE OF MATHEMATICS
IN
SCIENCE AND TECHNOLOGY**

**24th, 25th & 26th
October, 2024**



Organized by
DEPARTMENT OF MATHEMATICS

In Collaboration with
Internal Quality Assurance Cell (IQAC)
JAWAHARLAL NEHRU COLLEGE

Boko : Kamrup : Assam : India :PIN 781123

College Website : www.jncollegeboko.ac.in

Dept. Email : mathematicsjncb@gmail.com

ABOUT THE CONFERENCE:

Mathematical creativity is difficult to cultivate if one is restricted to rule-based applications without understanding the essence of the problem to be solved. The beauty of numbers, figures, and relationships among different mathematical concepts are generally seen as the essence of Mathematics, and this is true. It is also critical to recognize that the quest to understand how Nature works has served as the driving force behind mathematical innovation over the last centuries. Mathematics, together with experimental methodologies, forms the conceptual framework on which modern science depends and which underpins technology, with close interactions among them. It is natural for professional mathematicians to consider their field as an art in its own right, consisting of postulates, conjectures, lemmas, and theorems, intuitions, and proof procedures. It is often hard to maintain a good understanding of Mathematics of Reality in a classroom or departmental teaching-learning setting, and the underlying principles necessitate the involvement of experts and stakeholders from other fields of science and technology who share a common passion for Mathematics. Keeping all these factors in mind the conference aims to provide a platform for fruitful presentation and interaction on the following areas :

- * Mathematics in Artificial Intelligence
- * Mathematics in Quantum Computing
- * Mathematical Modeling of Natural Phenomena
- * Data Science and Big Data Analytics
- * Foundations of Mathematics for Science & Technology

ABOUT THE COLLEGE :

Jawaharlal Nehru College is a premier college situated at the Southern part of Kamrup district of Assam. With a glorious history of opening across a life span of 60 years, the college has been wholly committed in the pursuit of knowledge dissemination, preservation and generation too. From its inception the college has traversed a steady course towards expanding its academic and infrastructural needs. At present it has fourteen departments with honours at UG level in two streams - Arts & Science. Beyond that the college has initiated PG programmes in Assamese and Mathematics, Post Graduate Diploma in Computer Application, some career oriented and vocational programmes to cater to the needs of the students of the locality.

At present the college has grown up into a full-fledged well-known institution with academic excellence and co-curricular activities, particularly in the field of games and sports, culture, literature and social activities. The college is celebrating its glorious Diamond Jubilee year in 2023-24. To identify its strengths and weaknesses in the present-day context the college has got itself accredited by the NAAC for its third cycle in 2023 and accredited with B++ grade. After receiving the prestigious Star Status by five science departments from the DBT, Govt. of India in 2019, college has set a benchmark and became the first college of Assam to receive Star Status from the Department of Biotechnology, Govt. of India. To equip the youths with 21st Century skill, the college is planning to establish itself as a hub of knowledge and skills assigning MoU's with many other institutes.

ABOUT THE DEPARTMENT :

The Department of Mathematics, Jawaharlal Nehru College was established in 1986 and from 1992-93 it introduced Mathematics in UG Programme. In 2017 the PG programme under Gauhati University was introduced for the greater interest of the students to higher education and research in Mathematics. In the long run on the basis of teaching and research, to promote science as well as mathematics education in this greater area, this department had received grants from DBT under Star College scheme in the year 2015 initially for three years. In 2019 DBT recommended for awarding of DBT Star Status to this department among other four science departments of this college.

Using advanced technology in Teaching-Learning process, organizing training, workshop & seminars on uses of mathematics software, continuous guidance of students preparing for competitive examinations help the students to enhance their talent and academic performances. In last few years, some students of this department have achieved very good academic result in their final examinations and also qualified in National level Examination like JAM to enter in IITs for higher education and research.

ORGANIZING TEAM :

Chairman : Dr. Tapan Dutta, Principal, Jawaharlal Nehru College.

Advisors : Mr. L. K. Sarma, President, Governing Body, Jawaharlal Nehru College.

Prof. H.K. Sarmah, HoD, Department of Mathematics Gauhati University

Prof. Jordan Hristov, University of Chemical Technology and Metallurgy, Bulgaria

Prof. Naokant Deo, Delhi Technological University, India

Prof. Narayan Prasad Pahari, Tribhuvan University, Nepal

Dr. Wutiphol Sintunavarat, Thammasat University, Thailand

Dr. P. Nath, Vice Principal, Jawaharlal Nehru College.

Dr. Dhiraj Kr. Das, Associate Professor, Dept of Math, J.N.C.

Dr. Alimpa Bhuyan Baruah, Assistant Professor & Coordinator-IQAC

Chief Scientific Advisor : Dr. Hemen Dutta, Associate Professor, Dept. of Math, Gauhati University.

Convener : Dr. Dipankar Sarma, Associate Professor & HoD, Dept. of Mathematics, J.N.C.

Coordinators : Dr. Alok Das, Asso Professor, Dept. of Math, J.N.C.

Dr. N. Ahmed, Asso. Professor, Dept. of Chemistry, J.N.C.

Members : Dr. K.K. Thakuria, HoD, Dept of Assamese

Mr. M.K Das, Hod, Associate Professor, HoD, Department of Physics

Dr. A. K. Goswami, Associate Professor, HoD, Department of Chemistry

Dr. H. Rahman, Associate Professor, HoD, Department of Botany

Dr. Rekha Chetry, Associate Professor, HoD, Department of Zoology

Ms. Ratnamala Sharma, Associate Professor, HoD, Department of English

Mr. P. Bharali, HoD, Dept. Of Economics

Mr. N. Mahanta, HoD Dept of Education

Dr. D. Das, HoD, Dept of History

Mr. J. Rajbanshi, Dept. Of Geography

Dr. M. Das, HoD, Dept of Anthropology

Ms. B. Boro, HoD, Dept of Bodo

Mr. Naba Kumar Kalita, Lecturer, Department of Mathematics.

Mr. Dipu Moni Nath, Lecturer, Department of Mathematics.

Mr. Ripunjoy Choudhury, Lecturer, Department of Mathematics.

Mr. Jayanta Kalita, Lecturer, Department of Mathematics.

Mr. Ankur Jyoti Kalita, Lecturer, Department of Mathematics.

INVITED KEY SPEAKERS



LJUBISA D.R. KOCINAC
University of Nis, Serbia



CALOGERO VETRO
University of Palermo, Italy



KANHAIYA JHA
Kathmandu University



PRATULANANDA DAS
Jadavpur University, India



MUSLIM MALIK
IIT Mandi, India



RAJESH KUMAR PANDEY
IIT BHU, India



WATCHARAPORN CHOLAMJIAK
University of Phayao, Thailand

CALL FOR PAPERS :

Original research works are invited from researchers on areas related to the theme of the conference for presentation. The abstracts in the prescribed format should be sent to the Convener at email mathematicsjncb@gmail.com on or before 15.10.2024. Full papers may be submitted for possible publication in the conference proceedings.

ABSTRACT FORMAT

A one-page abstract should be prepared in the following format :

1. Use one page of A4 size paper.
2. Use 12 points Times New Roman for the main text.
3. Use Normal Page boarder.
4. Title, author's names, affiliations, correspondence address should be centred.
5. Insert two blank line between the affiliations and the main text.
6. Main text should be fully justified with a single spacing.
7. Use bold face with 14 point fonts for title but not for authors, affiliations, and the main text.
8. Please underline the presenting author.
9. Leave the space of 2.5 cm or 1.0 inch at lease on the bottom of the text. Page number will be printed there.
10. Figure, Chart, Bibliography should not be included.
11. Last date of online submission is 15 October 2024.

MODE OF CONFERENCE :

HYBRID
(OFFLINE & ONLINE)

REGISTRATION LINK

<https://forms.gle/fnD9UzfpD6pUSuNp9>



SCAN ME

Last Date of Registration:
15.10.2024

HOW TO REACH :

The Jawaharlal Nehru College is situated on the NH-17 at 55 km from Jalukbari, Guwahati and 135 km from Bongaigaon. The distance of the college from LGB International Airport (Guwahati) is 45 km through NH 17. Nearest Railway Station is Boko.

REG. FEE TO BE PAID TO THE FOLLOWING BANK ACCOUNT-

ACC. NUMBER : 7822060352
ACC. NAME : ACADEMIC SEMINAR WORKSHOP
FUND JN COLLEGE BOKO
BANK NAME : INDIAN BANK
BRANCH NAME : GAMURIMURA (5662)
IFSC CODE : IDIB000G517

REGISTRATION FEE :

For Teacher/ Faculty/ Industry persons : **Rs. 1500/-**

For Student/ Research Scholar : **RS. 750/- (WITH PRESENTATION)**

RS. 600/- (WITHOUT PRESENTATION)

Online Participation : **RS. 500 /- (FOR INDIAN PARTICIPANTS)**

Online Participation : **\$ 20 /- (FOR FOREIGNER PARTICIPANTS)**

*** REGISTRATION FEE MAY BE PAID ON THE FIRST DAY OF THE CONFERENCE AT REGISTRATION DESK.**

*** FOR ANY INFORMATION :**

Contact Nos. +919435340747, +918761985755